NEW ENGLAND FARMER.

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DISEASES OF CATTLE.

SELECTED AND COMPILED FROM THE BEST AUTHORS, BY THE EDITOR.

Loss of Joint Oil, or Synovia.

"Wounds, or punctures of the joints, often penetrate so deep as to pierce through the tendons and ligaments, occasioning a loss or discharge of the natural secretion of the joint, viz. its oil, or synovia; the same accident may happen from any injury exciting inflammation, and that inflammation passing on till it produces an opening into the joint. This disease is always an alarming one, and the principle of cure is to produce the process of healing as quickly as possible, by exciting active inflammation; this may be done after the first effects of the injury have subsided, in consequence of bleeding, purging and fomentation, in the usual manner, and then applying the volatile blister to the joint, composed of Spanish flies, in powder, two dr. and spirits of ammonia, four oz.; at the same time the orifice is to be plugged with a tent, dipped in the following composition:

Sweet spirits of Nitre	3 dr.
Butter of antimony, and extract of lead, each	2 dr.

The blister and caustic may be occasionally repeated; the mixture every twenty-four hours, till the effusion of joint oil is completely stopped; then the following balsam may be applied once or twice a day, in order to heal up the wound:

Tincture of myrrh	2 oz.
Blue vitriol water	½ oz.

"The vitriol water may be made by dissolving ten drachms of blue vitriol, in powder, in a pint of hot water; the balsam to be well shaken together previous to using it. The blister is to be well rubbed on the joint, till a plentiful discharge takes place from the surface, when it becomes no longer requisite. By this treatment a cure is generally effected, unless when the bones are materially injured along with the soft parts, and then any plan of cure will prove ineffectual. When weakness of the joint prevails, after the running of the joint-oil is stopped, which is generally the case, a plaister of pitch, &c. as recommended in page 249, should be applied."—*Skellet's Treatise.*

Mange.

This is a cutaneous disease, which is very contagious, for so many cows as come in contact with one laboring under the disorder will be sure to catch it. Its symptoms are, a scarf on the external part of the body, which is always attended with an itching. This the animal shows, by having a continual inclination to rub the affected part or parts against any thing she can get at. Some say that it is caused by a kind of animalculæ, which burrows in the skin. It generally attacks those animals which are low in flesh, and have been fed on poor forage.

The first step in order to cure this disease is to take a currycomb and gently curry off the scurf, in order that the medicine may have the better effect. After this the following application is to be rubbed on the parts affected, which may be repeated every three or four days till a cure is effected; and it seldom requires more than two or three applications:

Flowers of sulphur	1 lb.
Spirits of turpentine	½ pt.
Train oil, enough to make it into a thin liquid.	

Horn Distemper.

This is a disease which has its seat in the horns. Cows are more subject to it than oxen, and it does not attack bulls; and steers and heifers, under three years old, it is said, are not subject to it. The distemper causes the pith of the horn to be gradually consumed. It is most commonly confined to one horn only, but sometimes appears in both. It is occasioned by poor keeping, by which the blood becomes thin and reduced, and does not circulate properly in the extremities. It is discovered by the sluggishness of the animal, loss of appetite, a coldness of the horn, and a disposition to lie down.

To cure the disease, the horn should be bored with a nail gimblet in such a manner as to effect the discharge of the matter which has become purulent. The hollow part should be well cleansed by vinegar in which a portion of salt has been dissolved, to be injected by a syringe. Dr. Deane recommended the injection of a mixture of rum and honey, with myrrh and aloes. Stimulating medicines, such as ginger, spices, &c. have been given, but these are injurious until the bowels have been evacuated. Laxatives, however, such as sulphur, glauber's salts, &c. prove serviceable; and after the bowels are evacuated, and the horn well cleansed, good keeping will be necessary to effect the cure.

Tail Sickness.

"This is a distemper attended with weakness and sluggishness to which horned cattle are liable in the spring. The end of the tail becomes hollow, and relaxed, but not, as some have asserted, destitute of feeling. A cure is easily effected by the amputation of a small piece of the tail, which will be attended with a discharge of some blood. But when the tail is but little affected, and near to the end, a slit of an inch or an inch and an half, in the end of the tail, is preferable to amputation."

Ulcers.

An ulcer is "a solution of the soft part of an animal body, together with the skin." The symptoms of an ulcer, which is in a way to be healed, are granulations, or little eminences, arising from the surface of a florid or reddish color, small in size, and pointed at the top; the discharge, white and thick. This will generally be effected by giving the animal perfect rest, using mild and simple ointments, such as are composed of oil and bees' wax, or hog's lard, which is not rancid. Turpentine and lard melted together make a good ointment. The following has likewise been recommended:

Goose grease	1 lb.
Hog's lard	2 lb.
Red Lead	3 oz.
Pulverized alum	1 lb.

The goose grease and lard are to be melted over a slow fire; the lead is then to be added in fine powder, which is to be constantly stirred till it becomes cold, in order that it may be well incorporated. A little sulphur and nitre may be given by way of alterative.

If the ulcer assumes an inflamed state, and the surface is covered with a brown transparent matter, the following fomentation will prove useful.

Camomile flowers	½ lb.
Wormwood,	a large handful.
Bay and Juniper berries, each	4 oz.
Beer or ale grounds, emptins or yeast	6 qts.
Vinegar	1 qt.

The whole to be boiled for a quarter of an hour. Leeches applied to the edges of the ulcer will be serviceable, and purges of glauber salts or epsom salts.

If the ulcer becomes black and fetid, with a cessation of every inflammatory symptom, and there appears to be danger of mortification, give an ounce of Peruvian bark every four hours; a little opium may be joined with it. Fomentation with hot vinegar will be found useful. When the parts suppurate, cut off the dead matter with a knife, and afterwards dress with some simple ointment.

If there is too rapid a growth of fungous matter, or what is called proud flesh, it may be well to rub in a small quantity of the following caustic over the whole surface of the preternatural growth, with a spatula.

Soft soap	1 oz.
Arsenic	½ oz.
Oil of vitriol	½ oz.
Spirits of lavender	½ dr.

The soap and arsenic to be mixed first, and then the vitriol added by degrees. The whole may then be covered with the digestive ointment of tar and turpentine, prepared as mentioned in No. 29, page 225, 2d col. By these means part of the growth will become dead in a few days, which may be cut or pared off, and the same caustic application made to the remaining part till the whole is destroyed.

In ulcers in fleshy parts there is often a preternatural callous, or hardened growth. This must be destroyed before a cure can be completed. In this case, the before mentioned caustic must be applied, but used with caution. The hard part is to be rubbed with it for half the extent of the swelling, beginning at the orifice. The dead parts are then to be cut away every two or three days, and the application is to be repeated till the cure is complete.

We have now concluded, for the present, our observations on the diseases of Neat Cattle. It is probable we may have omitted to take notice of some disorders to which they may be subjected; and, if so, should be glad to supply the defect; and would be much obliged to any friends or correspondents who may be so good as to point out any errors which we may have committed, either through inadvertency or misinformation. Any remarks which may relate to disorders peculiar to our climate, will be particularly acceptable.

The doses prescribed are intended for cows, which have nearly or altogether acquired their growth. Oxen or bullocks having stronger constitutions than cows, will be more subject to inflammatory diseases, especially when exposed to labor. The remedies heretofore recommended, must therefore be increased in quantity when applied to full grown males. Dr. Skellett says that the bullock must be bled and purged, &c. a third more than the cow, which will be a proper general rule to be observed in all his diseases. This rule, however, must be modified, like every other general rule, according to the circumstances of the case, and the judgment of the practitioner.

Calves are subject to many of the diseases of cows, and in most cases their treatment must be the same, except that the means employed, such as bleeding, purging, &c. should be diminished about one third of what has been directed for the cow; making discretionary allowance for the difference of age, size, and condition of the animals.

ORIGINAL COMMUNICATIONS.

FOR THE NEW ENGLAND FARMER.

Mr. Editor—I have been a reader of your paper ever since its commencement, and I now begin to think it is high time for me to make a communication to you, which I believe will be beneficial to my agricultural brethren, and if you are of the same opinion, you will please to publish it, or such part of it, as you see cause.

The subject which I propose, is that of the more extensive cultivation of Oats. Various are the kinds of oats. The Barley or Scotch oats, so called, I have cultivated, but not with very great success; their weight is generally about 42 lbs. per bushel.—I have seldom been able to raise more than from 20 to 25 bushels per acre. The black oats I have cultivated; their weight is about 36 lbs. per bushel, and produce about as many bushels per acre as the barley or Scotch oats. The greatest objection I have to the barley or Scotch oats, is, that they must be harvested suddenly after they are fit, in order to prevent waste. The common oats which are raised, I consider preferable. My average crop of late years has been from 40 to 50 bushels per acre, and in one instance 65 bushels per acre.

I make oats principally, and generally speaking, my first crop in the line of a rotation of crops. I break up the piece intended for this crop in the fall, if possible, and in the spring cross plough and harrow thoroughly before I sow my grain; then harrow again until the turf is well pulverized; then sow ten bushels of clover seed chaff per acre, and roll it in. As soon as the grain is harvested, and the young clover has received its growth, I plough it in. This clover with the stubble, is about equal to a common dressing of compost manure. In the fall plough, in the spring I cross plough, after taking from my compost heap thirty loads per acre, which are carefully spread. The lot then being well harrowed and furrowed is ready for planting, either with corn, potatoes, or turnips. This is my second crop. For my third crop I again sow wheat, peas, flax, oats, &c. and stock the lot down with herds grass and red top, which I believe make the best of hay. I let the lot remain in grass three years. Thus you will observe I till three years, and mow or pasture three years. My first and third crop is principally oats.

I have frequently been told that oats and corn were very impoverishing crops; but I find no difficulty in enriching my land as above stated. Ten years ago my average crop of corn was from 30 to 40 bushels per acre. But in passing over a lot the second time which was managed as above in the summer of 1821, I had the satisfaction of harvesting 96 bushels of corn per acre, and received the Society's premium. My other crops have advanced in about the same proportion.

The inquiry will naturally be made, what I do with my oats? Well, sir, after I have reserved for my stock and for seed, I take the remainder to my mill and manufacture them into flour and meal. It will be understood that the oats are kiln dried, then hulled about as clean as rice, then ground, and bolted or sifted, as the case may be. That which I bolt is calculated to be mixed with wheat flour for bread; in which case the oat flour being kiln dried, must be scalded before it is mixed with the wheat flour, otherwise the bread will be too dry. Good oat flour, prepared as above, mixed with wheat flour, half and half, will make as light and pleasant bread as common country wheat flour, and it will trouble good judges of bread to tell it from clear flour bread. Again, it is excellent to make butter-cake, by the Yankees called slapjacks. The oat meal is calculated for puddings, and is a substitute for rye meal to mix with corn meal for bread, or with rye meal for bread. In either case the oat meal must be scalded before it is mixed.

Thus, after supplying my family, the remainder is for market. The oat flour I have generally sold in Boston and New York to the druggists. The meal is also purchased by the druggists. I have generally sold them oat flour for from four to five dollars per hundred, and the meal from three fifty to four fifty, which is, by them, retailed as medicine, from twelve to twenty cents per pound.

The meal is frequently bought by foreigners, by the barrel or hundred, for family use. The sale of oat meal is at present rather limited; the reason is that but very few people in this country, save foreigners, are acquainted with the use of it, except for medicine. Foreigners generally prefer oat meal to flour. I really hope both for our health, and the interest of agriculture, that the time is not far distant, when oat flour and meal will be used in every family for food.

Much may be said as to the value of this article as medicine, as well as for food. It has been a common article for food in Scotland and Ireland for many years. Seldom, if ever, an English, Scotch, or Irish vessel sailed without a supply of oat meal; and I may say it would be well for every commander of an American vessel, in making up his order for ship stores, to include a sufficient quantity of oat meal or flour for his voyage.

As I am one of the homespun family, and wish for information, I hope these few remarks will draw something from more able writers.

I will, when I have leisure, inform the public, through your paper, more particularly, as to the process of hulling oats and preparing the flour and meal, as well as to the construction of the mill and kiln. HENRY STEVENS.

Barnet, Vermont, Feb. 1823.

FOR THE NEW ENGLAND FARMER.

Mr. Editor—Having leisure by reason of age and infirmity to read papers and books, and finding you wish for communications from experienced farmers, I am induced to write. If what I communicate is of any use you are welcome to it, if not, make waste paper of it.

ENGLISH TURNIPS.

About the year 1788, or 1789, reading the English mode of ploughing for wheat fallow in the morning early, so as to plough in the dew, I concluded to raise turnips in that mode. I ploughed a yard seven or eight times, in which I had raised turnips the year before. The land was very poor, and had borne a worse crop. I sowed it the 24th of July without any manure of any kind, or enriching the soil in any way but by simply ploughing in the dews. The yard was about three rods square. I had a very large crop. I continued ploughing and sowing that piece for seven years without manure, later in the season every year than in the year preceding, till last year, when I sowed on the 20th of August, and had an excellent crop of sweet flavored turnips. I generally ploughed, yearly, from eight to twelve times before sowing. I have raised turnips on a larger scale since, and find them an excellent food for cattle.

Yours, &c. WALLIS LITTLE.

Townsend, March 4, 1823.

REMARKS BY THE EDITOR.

☞Mr. Little does not inform us *what sort of soil* he raised his turnips on. A heavy loam, or a soil on which clay is found in any considerable quantity, can hardly be ploughed too much. But we have some doubts whether a sandy soil is benefited by very frequent ploughing. A practical as well as scientific farmer told the Editor that he had attempted to improve a worn out field, with a sandy soil, by frequent ploughings when the dew was on, but did not succeed. The scorching rays of the sun appeared to rob the soil of its fertilizing particles, and as he expressed it, the more he ploughed his land the poorer it grew. The system of Tull, an old English writer of celebrity, who thought that frequent ploughing might, in all cases, serve as a substitute for manure, has been found not to answer. Sir John Sinclair has the following observations on this subject:

"The management of *sandy* land, according to the system adopted by the celebrated Duckett, has been strongly recommended by an eminent author, and is founded on three principles: 1. Ploughing very deep; a due degree of moisture was thus preserved in his light land, by means of which his crops were flourishing in seasons of drought, which destroyed those of his neighbors: 2. Ploughing seldom, but effectually, by a trench plough, or what he called a skim-coulter plough, with which he buried the weeds that grew on the surface; he has been known to put in seven crops with only four ploughings: and 3. Occasionally raising a crop of turnips the same season after a crop of wheat, or of pulse."*

It should seem to be the modern practice of husbandmen in Great Britain, when they cultivate sandy soils, to give one deep ploughing in 12 or 18 months, and shallow tillage afterwards, with what are called scarifiers, scufflers, &c. instruments which stir the surface to a small depth only.† We know that our cultivators are not apt to make too much use of the plough; but we submit it to consideration whether *some soils* may not be ploughed more than will prove beneficial to them? We hope Mr. Little will oblige us with something farther upon this subject, and inform us what kind of soil composed his turnip yard, which he made rich without manure, by ploughing only.

* *Code of Agriculture, p.* 15. † *Ibid, p.* 302.

FOR THE NEW ENGLAND FARMER.

Mr. Editor—I have known many farmers lose cattle, sheep and hogs, by their being

choked with roots and apples, and other similar articles, and have lost them myself, till I found the remedy below.

When an animal is choked, take a quart of water, a little more than milk warm, and put in it a good large spoonful of soft soap, and stir it well, and turn it down the creature's throat, about one third at a time. I never knew it fail of making them throw it up. It causes the throat to be slippery, and the root is then easily dislodged. W. LITTLE.

TO THE EDITOR OF THE NEW ENGLAND FARMER.

Agriculture is as much interested on the improvement of Machinery as the breed of Cattle, particularly mills, and other labor saving water powers.

I have been, through life, acquainted with mills; made many observations and experiments, being frequently employed to project and draught them for practical millwrights. Yet with a very essential part of correct millwriting, with all my study and observations, I am yet ignorant, or in other words, incompetent to calculate; that is, to calculate correctly the number of *cubic feet of water* that will run in a mill race of any given time, dimensions, and descent per rod.

Or, suppose I had a mill race dug with geometrical exactness, twenty rods long, with a fall or descent of one inch in each rod, two feet wide in the bottom and six feet on the top, and three feet deep at the upper end—how many cubic feet of water would such a race discharge in a minute, or any given time?

Or in other words, suppose that on such a race I had three water wheels, one requiring ten cubic feet of water in a given time, the others six and four feet in the same time—how deep must the water be turned into that race to supply the one, two or three wheels?

These are questions that in the prime of life I never could find correct rules to answer; and from many experiments on a long large mill race I fully proved that the deeper the water in the race the swifter it ran—that it ran swifter on the top than on the bottom—that it ran swifter in the middle than near the sides; that I imputed to friction.

We know that the whole power of water is the *specific gravity*. That the particles of water are globular, and its velocity is occasioned by rolling down an inclined plane, similar to what musket balls would do; that a cubic foot of water weighs 62½ lbs. Therefore by the rules of algebra there appears more given equations than unknown quantities, and by that rule we are limited for an answer. Yet from near fifty years study, I have been unable to discover a correct rule for such calculations.

I now use the freedom to appeal to the learned and ingenious gentlemen who have been engaged in canals in the Eastern States, to publish such a desired theorem in thy useful paper. And in return, life and health permitting, I may perhaps publish a theorem of equal value. It is well known to most people that there is a certain circular motion in which a bucket of water may be swung bottom upwards, and none drop out; that is, a certain motion in nature wherein the *centrifugal* force balances *gravitation*. It is the same motion in the laws of creation that retains the planets in their orbits—a law so absolute that every particle of matter on our globe is obedient to it; and that is the true motion for every wheel in a mill, and the stone also to run so that the *centrifugal* force may balance the friction on the gudgeons, and prevent what millwrights call backlacing.

My theorem, which is in algebraic expressions, may perhaps be made intelligible in arithmetic, and I will publish it in return for the one that I have requested.

SAMUEL PRESTON.

Stockport, Pa. Feb. 1823.

REMARKS BY THE EDITOR.

Our correspondent has, in the above, given us some ideas relative to one of the most difficult and perplexing branches of mathematical and mechanical philosophy. The theory of the motion of rivers and canals, the doctrines of hydraulics, hydrostatics, and the application of water power to turn the machinery of mills, is but little understood, in comparison to the advances which have been made in other sciences of less importance. "We have," says Professor Robinson, "merely skimmed over a few common notions concerning the motions of water; and mathematicians of the first order seem to have contented themselves with such views as allowed them to entertain themselves with elegant applications of calculus. This, however, has not been their fault. They rarely had an opportunity of doing more for want of a knowledge of facts. They have made excellent use of the few which has been given them; but it required much labor, great variety of opportunity, and great expense, to learn the multiplicity of things which are combined even in the simplest cases of water in motion. Although the first geniuses in Europe have, for this century past, turned much of their attention to this subject, we are almost ignorant of the *general laws* which may be observed in motions of fluids. Who can pretend to say what is the velocity of a river of which you tell him the breadth, the depth, and the declivity? Who can say what swell will be produced in different parts of its course, if a dam or weir of given dimensions be made in it, or a bridge thrown across it? or how much its waters will be raised by turning another stream into it, or sunk, by taking off a branch to drive a mill?"* This eminent writer confesses that he knows of no train of reasoning, by which he can connect the general laws of hydrostatics with the phenomena of the uniform motion of the water of a river or open stream, which can derive its motion only from the slope of its surface, and the modifications of this motion, or its velocity only from the width and depth of the stream. There are circumstances, he observes, in substance, which distinguish a portion of a river from a vessel of the same size and shape, in which the water is at rest. In both, gravity is the sole cause of pressure; but there must be some circumstance, peculiar to running waters, which modifies the exertion of the active principle, and which, when discovered, must be the basis of hydraulics.

The velocities of water issuing from orifices at various depths below the surface, are in the square roots of those depths; but this rule, owing to causes not fully explained, will not apply to running streams. The motion in rivers or channels is obstructed by inequalities, which give to the contiguous filaments of the stream transverse motions, which thwart and impede the regular progress of the rest of the stream. These obstructions are most effectual in the beginning of the course of the stream, because the stream being small, has more *outside*, or a larger proportion of the particles of water, in reference to the whole mass, is exposed to friction against the sides, or banks, of the stream and its bottom. The particles of a liquid move with less friction among themselves, than when in contact with a solid body, although the surface of the latter be as smooth as art can make it.

From the above premises, we believe it would follow that by doubling the quantity of running water in any given trough, pipe or channel, which shall be discharged at the lower extremity adjutage, or out let, in any given time, we *more than double* the power of such water to drive any kind of machinery. If running water, which would cover the bottom of a trunk or floom of any given dimensions, inclined in a given angle, one foot deep, would drive to advantage one pair of mill stones of four feet in diameter, by letting in water sufficient to cover the same floom two feet deep, at least three pairs of similar mill-stones might be driven. What millwrights call *the head and fall* would be increased one foot, or nearly doubled, if the plane on which the water run was not much inclined, and the friction against the bottom would be but very little, perhaps not any greater. But as we said before, this is a *very* abstruse subject, and requires more time and thought than we can at present bestow upon it.

We have seen an excellent treatise on the subject of Water Mills, by Mr. Smeaton, an Englishman, a celebrated Engineer, and the person who superintended the building of the Eddystone Light House. We have deferred our notice of Mr. Preston's communication for some time, with a hope of finding that work, which we believe would solve some of his doubts; but have not yet been able to put our hands upon it. We shall make some farther search, and if we should not succeed in obtaining it, shall endeavor to state, from recollection of long standing, some of the maxims it contains; particularly those which relate to the *power of small streams to turn machinery; the mode by which such power is best obtained;* and *the relative velocity to be attended to between the water-wheel which gives motion to mill-stones, and the mill-stones, in order to obtain the greatest power from the stream.*

* See Encyclopedia Brittanica, Art. River.

From the Republican Advocate.

Great Crops in Hartford County last season—with their mode of culture.

BARLEY.—Joseph Watson, Jr. raised in Hartford Meadow on one acre of land sixty-three and a half bushels of barley. The land was seldom overflowed. In 1820 it was well manured, planted with corn, and in the fall eighty bushels of corn were taken from the acre. In 1821 it was manured with about fifty loads of manure and four bushels of plaister and some ashes, and again planted with corn. 1st April, 1822, it was ploughed and soon after dragged, and on the 12th of April, it was again ploughed, and sowed on the 15th to barley, four bushels to the acre, well harrowed and stocked with herds grass and clover. The barley was mowed the 25th of July and threshed the first of January.

POTATOES.—The above named gentleman also raised on one acre of meadow land, 503 bushels and 3 quarters. The land was set to Tobacco in 1821, it was ploughed eight inches deep, and on the 26th May, it was furrowed out and planted in continued rows, three feet and eight inches apart, and manured in the rows with thirty loads barn yard manure, ten loads from the hog stye, and three bushels of plaister; thirty bushels of potatoes were planted on the acre and hoed twice with the horse hoe, and dug them the latter part of October.

FLAX.—Mr. George S. Spencer raised from one half acre of land, 199 pounds of well dressed Flax, and six bushels and twenty two quarts clean seed. In the fall of 1821, the land was sowed with wheat, having been previously manured with fifteen loads of yard manure. The winter killed a good part of the wheat. In the spring of 1822, the land was ploughed—it being very mellow, the soil a sandy loam—then dressed with a harrow, and sowed one bushel of the Long Island seed, then harrowed it in, pulled the flax in July, and dressed the same in January and February, 1823.

A letter received from a black man in Hayti, who emigrated there from Rhode Island some time since, speaks in high terms of the prospects in that island for settlers.

REMARKS
ON THE IMPROVEMENT OF CATTLE, &c.

In a letter to Sir John Saunders Sebright, Bart. M. P. by Mr. John Wilkinson, of Lenton, near Nottingham.

Let each succeeding race employ your care,
Distinguish which to slaughter, which to spare;
Mark well the lineage,—let the purest make,
From purest blood, its just proportions take.

(*Continued from page* 254.)

With respect to the value of different breeds as milkers only, some persons have attended solely to the quantity of milk given by each cow, while others have had regard only to the quality. But it is certain that this value must depend on the quantity and quality jointly, yielded from a given quantity of food.* By a given quantity of food is to be understood, not merely the same weight, but the same weight of the same kind and quality also; and in any experiment, it ought moreover to be given under similar circumstances. The time too allowed for an experiment of this nature ought to be at least a whole year; because some breeds will give a great quantity of milk just after calving, but will not yield that quantity for any considerable time; while others will not give so great a quantity at first, but will approximate to it much longer. As to the number of the cows, it need by no means be the same in two or more cases of trial; but the proper number for the consumption of the proposed quantity of food. For the question is not, whether the produce of so many of one breed, be more valuable than the produce of the same number of any other; but what will be the value of the produce afforded by a certain quantity of food, when bestowed on the one, compared with the value of the produce afforded by the same quantity of the same kind of food, when bestowed on any other; remaining circumstances being as similar as possible.

In comparing the value of any one breed with the value of any other, in reference to the shambles, it is very evident, that the placing out certain quantities of different kinds to feed, and comparing the increase of weight in each case with the quantity of food consumed, will never determine the question. Because, here the question is not which have paid the best for a certain period, but which have paid the best during the whole course of their lives; the different breeds being killed at that particular age which will give to them respectively the maximum of profit. That there is a certain age which is the most profitable for disposing of one kind; but another age, and far different, the most profitable for another, is a circumstance well known to every practical farmer.—Some breeds cannot easily be made fat till they are three or four years old; while others are capable of being so at any age we may think proper. I believe the most profitable age for disposing of fat cattle of the improved short horned breed, is from two to three years old, according to circumstances at the time of sale.—In all experiments of this nature, there are many and great difficulties to encounter in order to render the comparisons just; we may, however, proceed with a sufficient degree of accuracy to determine what breeds are unquestionably the best; and the greater excellence has always been yielded to those which arrive at the earliest maturity.

I now come to the descent or lineage of animals; and so vast is the importance of this part of my subject, that I thought I could not do better than notice it in the *title page* itself. And for the same reason also, I may be allowed to quote your own words, which are so apposite to my present purpose, and so perspicuous in the delineation of the truth you wish to inculcate; a truth which can never be too fully impressed on the minds of those who are engaged in the improvement of stock. They are as follows: "Regard should not only be paid to the qualities apparent in animals selected for breeding, but to those which have prevailed in the race from which they are descended, as they will always show themselves, sooner or later, in the progeny: It is for this reason that we should not breed from an animal, however excellent, unless we can ascertain it to be what is called *well bred;* that is, descended from a race of ancestors, who have, through several generations, possessed, in a high degree, the properties which it is our object to obtain." This observation of yours, sir, appears to me so comprehensive, so clear, and yet at the same time so concise, that I dare not attempt either to add or take from it; I will only endeavor to illustrate it by some familiar example, and as many are more conversant with the color of animals than the excellence of their shapes, it may not be amiss to refer to the former. Suppose, then a number of pure Devon cows to be crossed with a breed of perfectly white bulls; in this case it is probable some of the calves would be perfectly red, others white, and the greater part would partake of these colors jointly. If we were now to take the red heifers produced by this cross, and put them to a Devon bull, it would not be a matter of any great surprise, if some of their progeny, though sprung from red parents, should be perfectly white, and still less, that several should be mixed with this color; though it would not by any means be so probable as in the former instance. And were we thus to proceed through several generations, this white color would be less and less apparent in the breed, but would most probably occasionally shew itself in some individual or other. If on the other hand, we were to breed from pure Devons only, that is from those that have been carefully bred for a great length of time, we should reasonably expect their offspring to be of the same color with the parents themselves; while any deviation from this, would be looked upon as one of those changes, which nature sometimes produces out of the common course of things. And what has here been asserted of color, is equally applicable to peculiarity of form, or quality of flesh.

When a breed is once brought to that degree of perfection it is capable of, the same care must be used in the continuance, as was shown in the formation itself; or as you have justly observed, "what has been produced by art, must be continued by the same means." For, though animals that are themselves good, and have also been descended from a long race of valuable progenitors, are by no means likely to produce, even in a single instance, a bad offspring; yet I think it will no more be contended, that every animal produced by the same parents, is precisely of the same value, than that the red color in the Devon cattle is precisely of the same shade in each individual, or that the horns of the Lancashire are exactly of the same length. It has already been observed indeed, that there is a *strong* tendency for *like to produce like*, that there is a *slight* tendency to change, and that nature, moreover, *sometimes* deviates from her common course. If, however, such a deviation takes place, it may be continued; as experience teaches both in the animal and vegetable kingdom. And hence will very clearly follow, the impropriety of keeping a bad animal, on pretence that it is well descended; an error which some Breeders have fallen into, if not in judgment, at least in practice. Hence also it will appear, that this defective kind of animal of which I have been just speaking, is generally produced from some mixture of impure blood, or that the breed has been declining through several generations; in either of which cases it can never be said to be well descended. For, in order that an animal may be well bred, it is not sufficient that we are able to trace it to parents, the most perfect of their kind; but every intermediate gradation ought also to be good. It will appear too, from what has been advanced on the formation, the descent, and continuance of improved stock, that no animal can be depended upon for breeding, but what is in itself *good*, and is moreover *well bred* in the *strictest sense* of the words.

It may not be improper to observe, both with respect to the improvement and the decline of breeds, that they are in general gradual, and proceed but slowly through several generations. And hence, it is not at all inconsistent to say, that "animals have *at length* been produced very unlike their original stock;" and yet, at the same time, there is a strong tendency for "like to produce like." But this remark respecting the slowness of change, refers to distinct breeds, and also where any particular family is not crossed with others that are much better or much worse of the same kind; nor does it include adventitious circumstances, as pasturage, climate, &c. And it is on account of this slowness of procedure, that so many, who have originally engaged in the improvement of stock have been obliged to expend a considerable sum of money before they could obtain any material advantage; while those who have purchased of that stock, when improved, have reaped an immediate, and even a large profit.

With respect to crossing distinct breeds; it may be proper to divide the subject into one or two separate heads. And first, as to what may reasonably be expected from such a union.—Here you remark, sir, that "you do not, by any means, approve of mixing two distinct breeds, with the view of uniting the valuable properties of both." And from what follows, I conclude the import of the words to be, with the view of uniting these properties in the full

* This I think is so obvious, that I need not attempt to explain the fact itself; but only mention after what manner experiments ought to be made. Hence too it very clearly follows, that the determining of what quantity of cream is produced from a given quantity of milk, will never ascertain the relative value of different breeds as milkers. This rule indeed is defective on its own principles, as it will by no means ascertain even the quality; for the cream of some cows is far richer than that of others, and will yield a much greater proportion of butter.

perfection, in which they existed separately in each. We have occasionally been amused with such pretensions, yet he who is a careful observer of facts, will scarcely, I think, be inclined to credit them. I have seen much of the nature of crossing, for reasons that I shall afterwards mention, but never yet saw the accomplishment of an object so desirable, as the full attainment of the good properties in each, without any mixture of the bad. Indeed it must be obvious to every man of sense, that there is no reason to expect a perfect union of the former, rather than of the latter. The one are just as likely to be inherited as the other, and for the very same reason. The thing generally to be expected from mixing the breeds of animals, possessing properties differing in degree, in such an union of those properties in the progeny, that they may be greater than in the ancestry on the one side, but less than in that of the other: though it is also true, as you have observed, and as I have before hinted, that the offspring will sometimes nearly resemble one parent only. In crossing the cart mare with a blood horse, no man expects to obtain from the produce, the strength of the former, with the speed of the latter; but an animal, that is swifter than the cart horse, yet incapable of drawing so great a burthen. It does not follow, however, that no cross can be useful; it may be very much so. For instance, there are many situations, which will readily suggest themselves to the mind, where an animal with less speed, or less strength, than such a one as might reasonably be expected from the cross in the foregoing example, would by no means be so useful; and yet, where more of either speed or strength, would be almost, if not altogether unnecessary. Again, it occasionally happens, that a breed of cattle which is possessed of the greatest excellence, may be too large for the pasturage of a particular situation; and yet a cross from these might obtain a very considerable advantage. Or a breed, which is unprofitable on the whole, is sometimes kept for the sake of a particular quality, which it possesses in so high a degree, that it would scarcely be the worse, if this quality were somewhat diminished. And this I think is the case with the Alderney cow; a breed which is kept by some of the nobility and gentry, entirely on account of the richness of the cream; but yet, the quantity of milk afforded by them is so small, as to make them extremely unprofitable, even as milkers. I have frequently known this breed to be crossed however by a well-bred short horned bull; the produce are generally much better milkers than the Alderneys; are more beautiful in their appearance, as not being so rawboned; and frequently come to a very considerable weight. It will be inferred from what has been already said, and it is an inference which I have seen supported by numerous examples; that where one breed is inferior to another in each individual point, the worse will generally be improved by the better, not partially, but altogether. But where distinct breeds possess their several advantages in different ways, to expect a full and complete union of the good qualities of each, without any mixture of the bad, is to expect a result, contrary to the whole analogy of nature.

I shall inquire secondly, whether a cross from two distinct breeds can be *obtained* and *continued*, so as to unite in almost an equal proportion, the properties of both; and I am fully of opinion that this can be accomplished. The former part of the question has, I think, been already answered: and I have seen the latter effected between the long and short horned cattle. In this neighborhood there were many dairies of long horned cows, descended from the stock of the late Mr. Bakewell; and it was not at all surprising, that the possessors of such stock should be much prejudiced in their favor, on account of the eminence of so great a breeder. When however the improved short horned cattle began to make such rapid strides as they did about thirty years ago; many were willing to try a cross from them, but were not willing to proceed further for the present. This cross being extremely approved of, they rejected such as inclined too much after the one or the other; and continuing to breed from those that partook of the mean, a breed, usually called half horned ones, was at length established; as well known by their particular characteristics, as either of the former.

There is another mode of crossing, which has frequently been attended with the greatest advantage for the improvement of inferior breeds; which is, by crossing the females of the worse with the males of the better, and their produce again in the same manner, through several succeeding generations. By this method, the blood of the former will be more and more exhausted, and a breed at length obtained nearly resembling the latter;* according to the example you have given of Merino—Ryeland Sheep. Since however, the blood of the former, though less and less in each succeeding generation can never entirely be taken away; it will follow that the value of the produce at any particular time, must depend partly on the value of the females from whence the cross originally descended. I mentioned under the last head, a cross introduced by many in this neighborhood, between the Long and Short Horned Cattle, partaking in nearly an equal proportion of the properties of both. But afterwards, when the improved Short Horns had gained so complete an ascendency over the Long, and prejudice in favor of the latter, was borne down by experience; this cross, as well as the remaining Long Horned Cows, were put to bulls of the former description, and their produce again, through many generations; the result of which agrees with my present position; namely, that the future crosses, at length, so nearly resembled the Short Horned Cattle, as scarcely to be distinguished from them. The same thing has been effected by crossing Scot's in like manner; and I doubt not, might be from any breeds whatever.

It may be observed generally, and lastly, that no arguments against the system of crossing can be drawn from the nature† of the case; because it is *highly probable* that the various breeds of Cattle, descended originally from the common stock; and it is *absolutely certain*, that the original breeds if more than one, could not have been numerous. This, therefore, must necessarily exclude all objections, drawn prior to experience; and experience itself has frequently proved it to be highly beneficial. I have already mentioned a valuable cross, where richness of cream is preferred, between the Alderney Cow and improved Short Horned Bull. I have seen moreover, both Devons, Herefords, Lancashire, and Scots, all crossed with these Bulls, and all producing very valuable Stock. In Lincolnshire also, they are beginning to use them very much. Since indeed the improved Short Horned Cattle have been in such great request, as they have of late, there is scarcely any breed in the kingdom, where individuals have not been crossed with them; or any county into which some of them have not been sent.

But it is proper to remark, that the object of every cross, as well as of every distinct breed, ought to be the attainment of an animal, adapted to that particular situation, for which it is designed: for what may be most advantageous in one situation may be unprofitable in another. And unless this observation be attended to, we can never reasonably look forward to success. For instance, though I consider the improved Short Horned Cattle as by far the best for the country at large, yet there are situations where I should by no means recommend them. I do not think that the mountains of Scotland could be better stocked, than with that hardy, nimble little race, which at present possesses them; while some of their more fertile situations, might very well bear a cross from the breed just mentioned; and some the breed itself. On the other hand, scarcely any greater blessing could befal Ireland, than the introduction of the breed to a considerable extent. For land which is capable of bringing to any tolerable state of condition, a race of such hard, bad fleshed ones, as are generally found to infest that country, would be capable of bringing a better kind to the greatest state of perfection.

Nothing can be more contradictory than what has frequently been advanced by various persons on the whole system of crossing; the understatement of some, seems only to have called forth the overstatement of others; and interest or prejudice have rarely been forgotten. It would have been well, Sir, had some of these gentlemen attended to you on the subject; they would have been directed to an example where the result was likely to be beneficial, and their own reflections might have suggested many more. They would have seen also the idea of *the union of the good properties, existing separately in distinct breeds, without any mixture of the bad*, discarded on the ground both of reason and experience. In a word, they might have perceived, what they ought reasonably to expect, and what they ought not.

The reason I have been thus diffuse in the present part of the inquiry, is, that prejudice may not prevent a partial improvement, where a full and perfect one cannot be immediately effected; and to save others an expense, which some have unnecessarily incurred. Several gentlemen who have been convinced of the great advantage of improved Short Horned Cattle, have no sooner been in possession of a bull

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*It has before been remarked on the subject of crossing, that though the produce may be expected generally to partake of nearly an equal proportion of the properties of both; yet it not unfrequently happens, that some individuals take very much after one parent, and some to the other. And hence it will follow, that the approximation above mentioned, may be accelerated or retarded by a judicious or improper election in each succeeding cross.

†That *crosses are unnatural*, seems to be a phrase used by some, without understanding its meaning; and taken upby others without consideration.

and one or two heifers, than they have wished for more. On account of the demand however, it has frequently happened, that they have not been able to be supplied with a great number for the present. To remedy this, they have bought up some of the best Short Horned Cows they could meet with in the market, many of which, as might have been expected, have not answered the end proposed. My advice, therefore, to such gentlemen, is rather to cross the Cows they already possess with the improved Short Horned Bull; and gradually to get rid of them and their progeny, as the stock from their thorough-bred heifers continues to increase. By this means a pure breed would shortly be obtained; and, in the meantime, the rest, greatly improved. It would afford, moreover, an opportunity of comparing the improved Short Horned Cattle with the stock that had previously been kept; and conviction arising from experience, is always to be preferred to bare assertion.

It can scarcely be expected, that I should enter particularly into the praises of the improved breed of Short Horned Cattle, as it would have too much the appearance of extolling a race of animals because in one's own possession. I thought it would be better to confine myself to general rules, and to shew by what means the best of each kind may invariably be discovered. I have endeavoured moreover, to make the whole statement plain and simple; to divest it of every appendage which might serve either to disguise or conceal the truth; and to use that order which seemed best calculated to assist both the judgment and the memory. To this end therefore, I have treated, first of all, on the formation and improvement of distinct breeds; then, on the perfection of their shape, and the quality of their flesh; afterwards, on the comparative value of all, considered both as milkers and feeders; and, lastly, on the means to be used for the continuation of the most important properties, when such properties have been once established. But in doing this I have adverted to several other particulars, which appear to me to arise immediately from the subject, and to be in themselves of the greatest consequence. How far I have succeeded, Sir, in this part of my design, must be left to your superior judgment; and I can only say, should it meet your approbation, it will certainly afford me the greatest pleasure.

There is one observation I will make, which to many, may be of considerable use. In the course of my experience, when applied to for Cattle, I have several times been requested to send the smallest in my possession; when in point of fact, the situation for which they were wanted, was capable of feeding the largest Ox that ever grazed, supposing the animal to be of a superior quality of flesh, and in other respects good. And such requests I have *generally* found to be owing to the badness of the Cattle in those particular districts, rather than to the inferior quality of the land itself. In such cases, therefore, it is clearly of importance, that the animal should be of a good size, as well as of a good quality; because when such Cattle are found to do well, that alone will serve to remove the unfounded opinion respecting the soil. But you, Sir, who have excelled in such a superior degree with your Sheep and also in other respects, well known how much depends on the animal;* and that the soil is frequently blamed when the fault lies wholly in the stock. This I have seen proved again and again.

Nothing can be more just, than your observation, "that the attention which gentlemen of landed property have of late years paid to the improvement of breeds of domestic animals, has been extremely beneficial to the country." Had not such improvements indeed taken place during the last fifty years, it would not have been possible to supply the market with that quantity of animal food which the present population demands. Although in several districts these improvements are chiefly owing to the professional breeder; yet it is nevertheless certain, that there are many other situations, where they must first be introduced by the man of fortune. For the common farmer, either from a want of money, or the fear of a miscarriage, will rarely be induced to try an experiment, before he has had it in his power to witness the result. In such places therefore, where the improvements in stock, are at present, either few or none; I think it would not be found a bad plan for those gentlemen who supply themselves with valuable animals, to allow their tenantry to improve from their own stock at a certain reasonable rate. By this means they would soon repay themselves the small expense they had been at; would possess a valuable breed, instead of an inferior one; and by increasing the property of their dependants, would afford to themselves an additional security for their rent. Nor would this be at all injurious to the breeder; for the more valuable stock is known, the more it is sought after. And its great importance can never be better ascertained, than by a reference to the late distressed state of Agriculture. The extent of bankruptcy in those districts where such stock was to be found, was never any thing like equal to the extent, where it was not; other circumstances being the same in both cases. Whatever may be the real degree of success of each nobleman or gentleman in these undertakings; I think all may look forward to a fair remuneration; besides the satisfaction of conferring so great an advantage to their own immediate neighborhood, and being justly entitled to the thanks of the country at large.

I remain, Sir, you most obedient,
And very humble servant,
JOHN WILKINSON.

Lenton, near Nottingham, 1818.

*I suppose, indeed, had some of the finest animals, selected from your flock, been described to those who had never seen them, they would scarcely have given credit to the fact; while those who had been eye-witnesses, if unacquainted with what judgment and perseverance could effect, might have considered the production of such beautiful creatures, rather as accidental, than as arising from extraordinary skill in the art of breeding.

[*Appendix in our next.*]

Symmes' Theory.—We find from Newspapers, that professor Steinhausen, of Germany, is the author of a similar hypothesis, viz: that our earth is a hollow sphere, not more than two miles thick, on the outer surface of which we live. "If it be so," says the Philadelphia Union, "instead of searching for an entrance at the north pole, we had better begin to dig downwards at once, and see what kind of neighbors we have."

THE FARMER.

BOSTON:—SATURDAY, MARCH 15, 1823.

We have received repeated requests from a number of correspondents to publish particular articles, which will not pass unregarded, but meet our compliance as soon as leisure and room can be afforded. We are right glad to perceive an increased and still increasing attention to subjects deemed proper for insertion in our paper; and shall comply with the solicitations of our friends with all convenient expedition. In the mean time our readers may, if they please, apply to us the following couplet from the poet Churchill:

"He hobbled on, his will was good,
Could he go faster than he could?"

and instead of being offended with their freedom, we will thank them for their candor. The intelligence from Europe having set our news-mongers on the tip-toes of expectation, we have concluded to give them something just to slake their curiosity till they can have time and opportunity to mend their draughts at fresher and fuller fountains.

FARMER SUMMARY OF NEWS.

Important News from Europe!

☞London papers have been received to the 22d January, and convey news of much interest. A Manifesto of the Congress of Verona to European Courts has been issued, by which it is considered that the die is cast, and Spain "must fight"—or submit. The Spanish government appears to be undismayed; and in answer to the despatches of the Allied powers declares in the most decided tone, that it neither recognises, in any manner, the right of intervention, nor admits the necessity of any foreign cabinet to meddle with its affairs; and that the remedy of all the evils which may afflict the Spanish nation, only concerns itself. M. Galiano, one of the members of the Cortes, moved that the Committee on Foreign Affairs be instructed to present, within forty-eight hours, the project of an Address under all customary formalities, to be printed in all the living languages, and profusely distributed throughout Europe, in order that the whole world may know that Spain, though she desires peace, does not refuse war; that she is ready to renew the sacrifices she has made, and that she will never digress one step from her constitutional system. All the public bodies in Madrid have presented addresses to the Cortes, tendering their "lives and fortunes," and breathing revolutionary language.

It would seem by the Manifesto of the Congress at Verona, that the attempts of the Greeks to gain their freedom have not met with the approbation of these potentates. Every approximation to freedom seems to call for the exertion of their energies. The Manifesto contains the following observation—"At the moment when the military insurrection in Naples and Turin yielded at the approach of a regular force, a fire-brand of rebellion was thrown into the Ottoman Empire."

A Paris article of January 12th, says there has been a secret sitting of the Cortes to treat of the question of English indemnities for the seizures of English vessels in the West Indies, of which so much has been said of late. The Cortes are willing to admit the claim, and an amicable adjustment will soon take place.

By an article published at Madrid Jan. 9, it appears that the Spanish government has issued two decrees; by the first all the ports of the Spanish Colonies in South America will henceforth be open to all nations; by the second, the demands of the English merchants, respecting the losses they have sustained by the piracies in the South Seas have been inscribed upon the great book of the public debt.

There is every appearance of vigor and animation in the councils of Spain, and public spirit is raised to the highest pitch of excitement. But it is to be apprehended that internal divisions are at least as much to be dreaded as external invasion. Gen. Quesada, one of the oldest of the Spanish generals, has declared that "a Bourbon would redeem the evils to which Bonaparte subjected us, and it is under triumphal arches that a French royalist army would march on its way

to Madrid. The whole population would spontaneously join the French, and the news of its approach would act with electric effect in all our provinces. We did not refuse the aid of the English and Portuguese against Bonaparte; how then can we reject the aid of the French, our natural allies, to annihilate the revolution?"

The Austrian, Russian and Prussian ministers left Madrid on the 13th January, and orders have been sent to the French Minister to leave that capital.

An Austrian army of 40,000 men is ordered to assemble in the Italian Provinces; and a Prussian army of an equal number, on the upper Rhine, to march through France whenever his Majesty shall require it. Russia has an army in Poland of 100,000 strong.

Earthquake in South America.—On the 18th Nov. a terrible earthquake took place at Valparaiso which in two or three minutes laid almost the whole city in ruins, so that not a dozen dwellings remained habitable with safety and comfort. Three hundred persons perished by the falling of buildings, many are missing, and many more wounded. The Governor's palace was destroyed, and the Supreme Director had nearly lost his life in attempting to escape from it. Several towns and villages in the neighborhood were greatly injured.

Later Stitl.—Since the above was in type we have learned that London papers have been received in New York as late as the 30th of January. They have a very warlike aspect, and there appears to be no other hope of war's being evaded but the powerful interference of Great Britain. A speech of Louis XVIII, at the opening of the session of 1823, contains the following paragraphs:—

"I have ordered the recall of my Minister. A hundred thousand Frenchmen, commanded by a Prince of my family, by him whom my heart recognizes as a son, are ready to march, invoking the God of Saint Louis to preserve the throne of Spain to a descendant of Henry IV.; to preserve that beautiful kingdom from ruin, and to reconcile her to Europe."

"If war be inevitable, I shall omit no effort to narrow its circle, and to limit its duration. It shall be undertaken for no other purpose but to conquer that peace which the state of Spain would render impossible. Let Ferdinand VII. be free to grant his people the institutions which they can hold only from him, and which, by securing their repose, will dissipate the just apprehensions of France. From that moment hostilities shall cease. This solemn engagement, Gentlemen, I enter into in your presence."

Notwithstanding this appearance of determined coercion, a London paper says—"Many parts of the French King's speech seemed incomprehensible to the public, and the fall of the various funds has not been so great as was expected on the receipt of such an important document. An opinion now prevails that England will yet be the means of preventing a war by her interference," &c. But other papers consider war as inevitable.

A letter from Verona mentions, that the Archdutchess Maria Louisa, widow of Napoleon Bonaparte, was seen at a musical party of the duke of Wellington's, familiarly leaning on the arm that guided the enemies of Europe so successfully against her husband's power and dignity! What would O'Meara say to this?—but "*varium et mutabile semper fœmina!*"

Godwin, who still lives and thrives, has in the London press, a "History of the Commonwealth of England."

DOMESTIC.—Much damage has been done in various parts of the country by the late rise of waters.—The bridge on the Providence and Pawtucket turnpike road, the bridge on the old road commonly called Natick bridge, and a bridge in Olneyville were all carried away. A bridge at the Arkwright Factory, and one at the Hope Factory were injured, but are passable. Easton's dam in Burrillville was carried away, which in its descent carried away a bridge on the Douglas turnpike. A bridge at Anthony Factory, a grist and saw mill at Coventry, R. I. a Methodist Meeting-house, a new toll bridge valued at $10,000, and an Oil Mill at Norwich, Con. and a bridge on the Cheshire turnpike near New Haven, have all been swept away by the deluge. One man was drowned at Norwich.

Hon. Benj. W. Crowninshield is elected member of Congress in Essex South District—and Hon. Jonas Sibley in Worcester South. In Worcester North no choice.

The Health Commissioners of Boston have offered 400 dollars reward, for the discovery and conviction of any person or persons guilty of robbing the graves of the bodies buried therein.

A volume has been published in this city, entitled "Memoirs of the Life and Character of the Rev. John Eliot, Apostle of the North American Indians. By the Rev. M. Moore, pastor of the church in Natick."

An order has passed both houses of the Maryland legislature for a survey of a route for a canal from the city of Baltimore to the Potomac river.

Hon. Henry W. Dwight, member of Congress from Berkshire, Francis C. Gray and Abraham W. Fuller, Esqrs. of Boston, and Benj. R. Nichols, Esq. of Salem, have been admitted at Washington to practice in the Supreme Court of the U. States.

Dreadful Calamity!—The following is an extract of a letter from a gentleman in Mecklinburg, N. C. to a gentleman in Charleston, dated 11th February, 1823—"One of the most afflicting scenes has occurred in this neighborhood—perhaps scarcely to be recorded. The house and property of Mr. Robert Walkup, was consumed by fire about 12 o'clock on the night of the 7th inst. What is most lamentable, five persons, principally young men, (four of them his own children) and a son of Mr. Huey, were entirely consumed in the flames as they lay up stairs!! The house caught fire by accident. Mr. William Flinn, brother to the late Rev. Dr. Flinn of Charleston, escaped by jumping out of the end window, but unfortunately broke his thighs. It was an awful scene to behold next morning."

The National Intelligencer informs us, that not one of the two hundred and five members of Congress has been dangerously ill, during the session which has just terminated.

We understand, (says the Richmond Enquirer) that Mr. Hugh Nelson accepts his appointment as minister to Spain, and will probably sail about the 1st of April.

The expense, so far, of the great Erie Canal, is five million, six hundred and three thousand, eight hundred and sixty-three dollars, and eighty-five cents; wanting to complete the same about two millions more. This estimate is given in a Report of the Canal Commissioners, published in the New York Advertiser, of the 4th inst. When this Canal is completed, says the Advertiser, the works at the Cahoose, Little Falls, the aqueduct at Genesee river, the embankment at the Irondequoit, and the excavation of the rock through the mountain ridge, will afford monuments of the powers of man, and the enterprise of the age, equal to the proudest work of Rome, Greece or Carthage, and scarcely inferior to the mighty emblems of Egyptian grandeur.

Fire.—The house and harness maker's shop of Mr. Whiting, in Concord, Ms. was destroyed by fire on Tuesday last,

Invention.—Adolphus Allen, of Georgetown, D. C. has received a patent for a Water Wheel, which he says is propelled by both ebb and flood tide,—will save the expense of a dam,—is not retarded by back water,—may be applied to any kind of machinery,—and is a very cheap wheel to erect. The Tide-mill, combining these and several other advantages which he enumerates, is certainly worthy of public attention.

Mr. Poinsett has transmitted to Charleston a valuable collection of minerals, collected by him while in Mexico. The Southern Patriot says that most of them are beautiful, some magnificent, and many that would add value to any collection.

The deaths in London during the year 1822, were 18,855; in Philadelphia they were 3,591; in New-York, 3,231, and in Baltimore, 2,319.

By a late report of the Methodist Episcopal Church, it appears, that the total number of Methodists, in G. Britain and her dependencies is 252,570, and the number of travelling preachers there, 970. In the U. S. west of the Alleghany, there are more than one hundred and five thousand members, about four hundred travelling, and nearly one thousand local preachers.

The Looking Glass Curtain at the N. York Theatre is 33 feet by 11 1-2, exclusive of the frame, contains 569 square feet of glass, and its whole weight is nearly two tons.

CONGRESS has finished its session, and, we believe, all is well. There has been but little vehement debate, and very few attempts at displays of oratorical powers. A bill for the prompt settlement of public accounts, and for the punishment of perjury has been passed. A bill has passed both Houses, which provides for admitting revolutionary soldiers upon the pension list, who have become reduced in circumstances, although they may have formerly possessed property sufficient to preclude their claim; and the Senate has receded from a proposition to reduce the pensions 20 per cent. On motion of Mr. Lloyd, of Mass. it has been resolved that the Secretary of the Treasury be directed to cause to be laid before the Senate, at the commencement of the next session of Congress the amount received by every officer in the customs from his per diem, and every other allowance to which he is entitled, by his official employment, and whether any offices may be abolished consistent with the public interest. The Senate adjourned *sine die*, at a late hour in the evening of the 3d inst. A resolution passed the House by a vote, nearly unanimous, that the President be requested to make arrangements with other powers to put a stop to the Slave Trade, and cause it to be denounced as piracy, under the Law of Nations, by consent of the civilized world. A resolution passed, on motion of Mr. Fuller, requesting information from the President, relative to the pretended blockade of the ports of the Spanish Main, and what measures had been taken to obtain restitution of vessels of the U. S. captured by privateers, fitted out at Porto Rico, &c. The thanks of the House were presented to Mr. Barbour, the Speaker, and after the customary interchange of civilities, the House adjourned *sine die*.

PRICES OF COUNTRY PRODUCE, &c.

[Revised and corrected every Friday.]

		FROM D. C.	TO D. C.
ASHES, pot, 1st qual.	ton.	145 00	156 00
pearl do.		155 00	156 00
BEANS, white,	bush	1 00	1 10
BEEF, mess, 200 cwt.	bbl.	9 50	10 00
cargo, No. 1.		8 50	9 00
" No. 2.		6 50	7 00
BUTTER, inspect. 1st qual.	lb.	15	16
" 2d qual.		12	13
small kegs, family,		16	17
CHEESE, new milk		7	9
FLAX		8	9
FLAX SEED	bush	90	1 00
FLOUR, Baltimore, superfine,	bbl.	7 50	7 75
Genessee		7 50	7 75
Rye, best		4 50	5 00
GRAIN, Rye	bush	80	85
Corn		72	75
Barley		68	70
Oats		44	47
HOGS' LARD, 1st sort	lb.	9	
HOPS, No. 1,		10	12
LIME,	cask	1 25	1 50
OIL, Linseed, American	gal.	65	70
PLAISTER PARIS	ton.	3 00	3 25
PORK, Navy Mess	bbl.	12 50	13 00
Bone Middlings		15 00	15 50
Cargo, No. 1,		12 50	13 00
Cargo, No. 2,		11 50	12 00
SEEDS, Herd's Grass	bush	2 25	2 50
Clover	lb.	8	9
WOOL, Merino, full blood, washed		50	60
do. do. unwashed		40	45
do. 3-4 washed		45	47
do. 1-2 do.		40	45
Native do.		35	40
Pulled, Lamb's, 1st sort		55	60
do. Spinning, 1st sort		47	50
PROVISION MARKET.			
BEEF, best pieces	lb.	8	10
PORK, fresh		5	7
VEAL,		6	9
MUTTON,		3	7
POULTRY,		7	10
BUTTER, keg & tub		16	17
lump, best		20	22
EGGS,	doz.	16	18
MEAL, Rye,	bush	90	
Indian,		80	85
POTATOES,		37	
CIDER, liquor,	bbl.	1 50	
HAY, best,	ton.	20 00	24 00

BY T. G. FESSENDEN.

ON THE LAUGHTER OF FOOLS.

A bunch of thorns beneath a boiling pot,
That flashes with a deal of crepitation,
Is like a fool,* whose days are spent in what
Johnson would call a state of *cachinnation*.

His features glimmer with some scurvy joke
His wandering wits have long been seeking after;
Then flies his "bolt," succeeded by a stroke
Of thundering self-congratulating laughter.

Elated by each would-be witty thing
He has *himself* the happiness of saying,
His throat and lungs so dissonantly ring
You'd think his kindred animal was braying.

And when some greater, and more noted dunce
Makes vain attempts at wit or repartee,
His grinning faculties take fire at once,
And one fool echoes to another's glee.

There is contagion in a great man's mirth,
Which all must catch who would be tho't genteel;
And when he says the silliest things on earth,
Salute him still with laughter's loudest peal.

Thus when the leader of a flock of geese
Pipes to his cackling comrades, one and all,
Each goose and goslin bids the din increase,
Till swells the concert with one general squall.

Too many a "*pretty looking*" Miss I've seen,
Whose every word was prefac'd with a titter,
And thought it strange, with beauty's air and mien,
The cap and bells of foolishness should fit her.

Next to the villanous Sardonic grin,
The heartless laugh of pride and affectation,
To show white teeth, a dimpled cheek or chin,
Merits and meets the highest reprobation.

I've not the least objection to a laugh,
To chase the fiend of "loathed melancholy,"
But hate the lowing of a biped calf,
Whose laughter sounds the trumpet of his folly.

E'en now and then a hearty ha, ha, ha!
Is well enough, in Chesterfield's despite,
But those who laugh, and cannot say what for,
In my opinion act like idiots quite.

* *Ecclesiasticus vii*, 6.

Providence never intended to make such a difference between creatures of his hand, as that some should live only to enjoy, while others lived only to be ministers of enjoyment.—Though in an advanced stage of society some must be exempted from eating their bread with the sweat of their brow, and be busied rather in intellectual than manual labor, yet it is an immutable decree that the oil of gladness shall brighten the face of industry alone.

The conversation of men of talents and information furnishes a delightful and profitable source of knowledge. In this way we may avail ourselves of that intellectual wealth which is more valuable than gold, and by the exchange of ideas a sort of mental commerce may be kept up, which enriches all the parties concerned.

The interests of agriculture, manufactures and commerce are so inseparably connected that any serious injury suffered by one of them must injure the others.

From the Emporium.

ITS ALL MOONSHINE.

When I see a young man pursuing a gay butterfly of a girl because she is beautiful, though she possesses none of the qualifications necessary to make a good wife, a good house-keeper, or a good mother—depend upon it he is grasping at a phantom—*its all moonshine.*

When I see pleasure hunters, and those who are seeking after happiness, plunge into dissipation; or seek gay and giddy company; or drink deep of the cup of sensual enjoyment, I feel for them; I know the disappointment that awaits them; these are not the pearls of price, that bring with them peace and content; they are worthless—*they are nothing but moonshine.*

When I see a gambler forever running to the billiard table, with eager hopes of making money thereby, and carrying with him the means by which his family can be supported, to squander it there; I think with a sigh how sadly that poor man mistakes the path of wisdom, and labors after that which is *all moonshine.*

He is grasping at moonshine, who strives to raise his consequence in the world by a suit of fine clothes, or an unpaid for sideboard; and so he is who aims at building a foundation upon which to elevate himself in the estimation of the world, on a few thousand of paltry dollars; for, as Burns says,

> The *rank* is but the guinea's stamp—
> The *man's* the gold for all that—

and none can ever become truly great but those whom nature has fitted to be so.

These are plain palpable cases; I have sometimes thought men were grasping at moonshine too, who attempted to live by literature, or make money by printing papers; or dreamed of collecting their debts or of receiving legacies in these times; yet as these may be doubtful, I will not persist in them.

Another Caution.—Two children were one evening last week nearly suffocated by inhaling the vapor from a pan of burning coals placed in a small bed chamber. During the absence of the parents, the children were put to bed in an apartment containing no fire place, about half a peck of lighted charcoal placed there *to warm the room*, and the door shut! A slight groan was accidentally heard by the only person awake in the house, who hastened to the chamber and found the youngest, about four years old, in a state of insensibility and entire prostration; from which by the use of the most active measures, he was not recovered until more than half an hour had elapsed. The eldest was faint and speechless for about the same length of time. Parents and others cannot regard this fact with too much concern. There is nothing more destructive to the vital organs, than the mephitic effluvia which arises from charcoal in a state of ignition.—*Nantucket Inq.*

Amidst all the singularities of *the Shakers*, they have some rules which it would be well for people of all denominations to adopt:—"It is contrary to order, or the gift, as they call it, (says Professor *Silliman*, in his Tour,) to leave any bars down, or gates open; or leave any thing they use out of its proper place; consequently they seldom have any thing lost. It is according to the gift, or order, for all to endeavor to keep all things in order; indolence and carelessness, they say, are directly opposite to the gospel and order of God; cleanliness in every respect is strongly enforced—it is contrary to order even to spit on the floor—A dirty, careless, slovenly, or indolent person, they say, cannot travel in the way of God, or be religious. It is contrary to order to talk loud, to shut doors hard, to rap at a door for admittance, or to make any noise in any respect; even when walking the floor, they must be careful not to make a noise with their feet. They go to bed at 9 or 10 o'clock, and rise at 4 or 5. Every man and woman must be employed, and work steadily and moderately."—Trifling as these rules may appear, their adoption would have a very important effect upon any household or community.

Sparrows.—It has been ascertained, as nearly as such things can be, that a pair of sparrows destroy in one week, 3360 caterpillars. We did not know before, but we should always remember, the obligations we owe to these little favorites of heaven.

While the celebrated Mr. Dodd was balancing between his inclination to marry, and his apprehension that he would be unable to maintain a family with his slender income, he happened, on looking out of his window, to observe *a Hen*, with a large brood of chickens, busily employed in supplying them with food by scratching, &c. This spectacle decided his mind in favor of matrimony. "If, thought he, this hen, who could barely, with her exertions, but a short time since, obtain a subsistence for herself, is now able to provide for her numerous offspring, surely I and mine will not be permitted to suffer."

When Cowper was made Bishop of Galloway, an old woman who had been one of his parishioners at Perth, and a favorite, could not be persuaded that her minister had deserted the Presbyterian cause. Resolved to satisfy herself, she paid him a visit in the Canongate, where he had his residence, as Dean of the Chapel Royal. The retinue of servants through which she passed staggered the good woman's confidence; and on being ushered into the room where the Bishop sat in state, she exclaimed, "Oh Sir, what's this?—And ye ha' really left the guid cause, and turned prelate!" "Janet (said the Bishop,) I have got new light upon these things." "So I see Sir, (replied Janet;) for when ye was at Perth, ye had but ane candle and now ye've got twa before ye; that's a' your *new* light."—(*M'Crie's Life of Melville.*)

Tight Lacing.—It has long been a matter of regret with persons of good sense and good taste, that many of the females of this country injure their health and real beauty of form, [as the pressure generally forces out the parts unpressed] by the absurd practice of wearing tight stays. The folly seems now to have spread to the men, if indeed such blockheads merit that appellation. It is a fact that an *exquisite* fainted away on Friday in Bond street, and was assisted into a shop, where he was some time before he recovered. Medical aid was sent for, when it was ascertained that his stays were too tight.—*London paper.*